Name: ANSWER KEY Date: _____

Period: _____ Ch. 3 Practice Test Inequalities

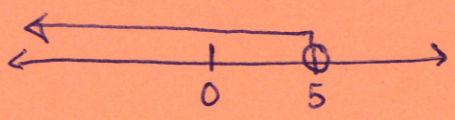
Directions: Solve and graph each inequality.

1. $3x + 4 < 19$

$-4 \quad -4$

$3x < 15$

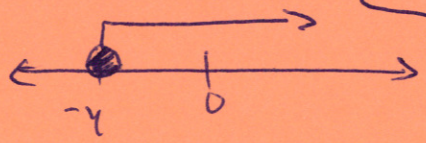
$x < 5$



2. $\frac{5-4p}{7} \leq 3 \rightarrow 5-4p \leq 21$

$-4p \leq 16$

$p \geq -4$



3. $4(1-p) \geq 4(2+p)$

$\frac{4}{4} \quad \frac{4}{4}$

$1-p \geq 2+p$

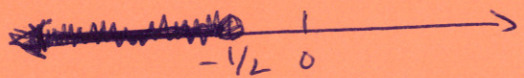
$+p \quad +p$

$1 \geq 2+2p$

$-2 \quad -2$

$-1 \geq 2p$

$p \leq -\frac{1}{2}$



4. $\frac{2(1-x)}{2} > \frac{-2(1+x)}{2}$

$1-x > -1(1+x)$

$1-x > -1 \quad -x$

$+x \quad +x$

$1 > -1$

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ALL REAL #S

5. $3(c+1) > 3c+5$

$3c+3 > 3c+5$

$-3c \quad -3c$

$3 > 5$

$\emptyset$

NO Solution

6. $8-5(x+3)-2x \geq -4x-7(x+1)$

$8-5x-15-2x \geq -4x-7x-7$

$-7-7x \geq -11x-7$

$+7 \quad +7$

$-7x \geq -11x$

$+11x \quad +11x$

$4x \geq 0$

$\frac{4x}{4} \geq \frac{0}{4}$

$x \geq 0$

7. $4(x-5)+2(x+7)\le 3x+12$

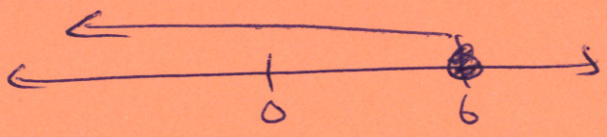
$4x-20+2x+14 \le 3x+12$

$6x-6 \le 3x+12$

$-3x+6 \quad -3x+6$

$3x \le 18$

$\boxed{x \le 6}$



8. $\left(\frac{1}{2}x+\frac{3}{4}<\frac{1}{6}(x-12)\right)^{12}$

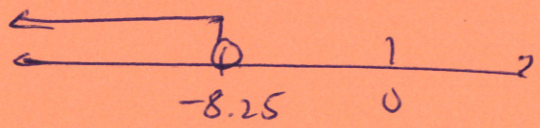
$6x+9 \le 2(x-12)$

$6x+9 < 2x-24$

$-2x-9 \quad -2x-9$

$4x < -33$

$\boxed{x < -8.25}$

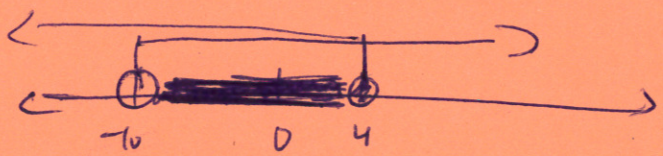


Directions: Solve and graph each compound inequality.

9. $-4 < t+6 \le 10$

$-6 \quad -6 \quad -6$

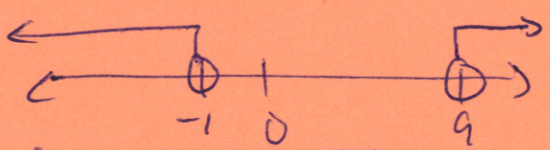
$-10 < t \le 4$



10. $n-4>5$ AND $2>n+3$

$+4 \quad +4 \quad -3 \quad -3$

$n>9 \ \& \ -1>n$

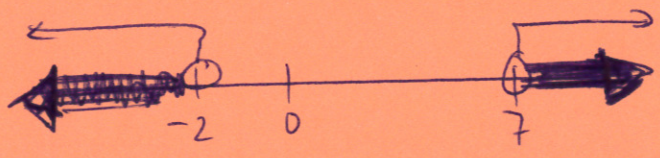


$\boxed{\text{No Solution}}$

11. $-3+r>4$ OR $r+1<-1$

$+3 \quad +3$

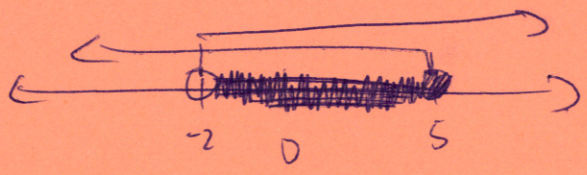
$r>7$ OR $r<-2$



12. $p + 8 > 6$ AND $12 \geq p + 7$

$-8 \quad -8 \qquad -7 \quad -7$

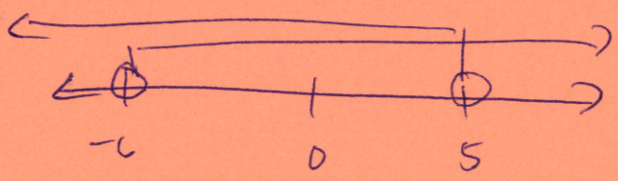
$p > -2 \qquad 5 \geq p$



13. $3 < s + 9$ OR $1 > s - 4$

$-9 \quad -9 \qquad +4 \quad +4$

$5 > s$ OR $-6 < s$



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